

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/809,833	BARROUX, CLAIRE	
	Examiner Dwin M. Craig	Art Unit 2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to 7/19/2007.
2.  The allowed claim(s) is/are 1-13.
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some\*    c)  None    of the:
    1.  Certified copies of the priority documents have been received.
    2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_

## DETAILED ACTION

And

### EXAMINER'S REASONS FOR ALLOWANCE

1. Claims 1-13 are allowed.

#### *Examiner's reasons for Allowance*

2. The following is an examiner's statement of reasons for allowance:

While *Meier et al.* teaches a lumping method for estimating the properties of the behavior of liquid and vapor hydrocarbon phases relative to a reference set consisting of hydrocarbon mixtures is a series of thermodynamic sets resulting from underground hydrocarbon reservoirs and *Watts* teaches, surface conditions encountered during reservoir production, **none of these references taken either alone or in combination with the prior art of record disclose** grouping each one of said hydrocarbon mixtures into at least three constituents (V,I,H), none of these constituents corresponding to a particular selection of base components or pseudo-components that would be used for a detailed compositional descriptions of fluids, the Examiner notes that the prior art teaches that constituents modeled in prior art practices are almost always modeled as pseudo-components, unlike Applicants' claimed method of modeling constituents which expressly claims not using pseudo-components.

(claim 1) "...grouping each one of said hydrocarbon mixtures into at least three constituents (V,I,H), none of these constituents corresponding to a particular selection of base components or pseudo-components that would be used for a detailed compositional descriptions of fluids...", **in combination with the remaining elements and features of the claimed**

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**invention.** It is for these reasons that the Applicants' invention defines over the prior art of record.

**2.1** Claims 2-13 are allowed for at least the reason that they depend from an allowed base claim.

**2.2** Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Claim Rejections - 35 USC § 101***

**3.** In view of Applicants' amended claim language, more specifically in view of the amended claim language wherein Applicants' claim actually performing *simulating a production of the hydrocarbon reservoir* has rendered the instant claims tangible, concrete and useful and therefore the previously applied 35 U.S.C. 101 rejections of the claims is withdrawn.

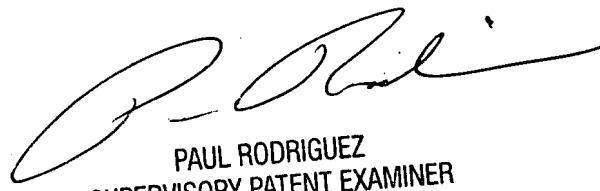
***Conclusion***

**4.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwin M. Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 - 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul L. Rodriguez can be reached on (571) 272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dwin McTaggart Craig  
AU 2123



PAUL RODRIGUEZ  
SUPERVISORY PATENT EXAMINER  
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